

EDITOR'S PAGE

Is E-Biomed the Future of *JACC*?

William W. Parmley, MD, MACC

Editor-in-Chief, Journal of the American College of Cardiology



You have reviewed the data with the research fellow and approved the final version of the manuscript. You are ready to submit it for publication. Accordingly, you click "send" on your computer screen and your manuscript may appear almost immediately on the NIH-sponsored E-biomed and will be available to the entire world through the Internet. This is one aspect of the controversial E-biomed proposal of Dr. Harold Varmus, Director of the National Institutes of Health (1).

Two mechanisms for submission of manuscripts are envisioned. The first option is more traditional and would incorporate current editorial boards of scientific journals in the usual way. Once a manuscript is accepted, it is posted immediately on E-biomed and would be listed in the current table of contents for that journal. If an article is rejected and if the authors deem it difficult to publish elsewhere, they may utilize a second option by directly submitting it to E-biomed. It would then have to be approved by two individuals before entering the data base. Criteria for approval would "be sufficiently firm to guard against gross abuse of the E-biomed repository, but sufficiently flexible to permit rapid posting of virtually any legitimate work" (1). It is then envisioned that such an article *already posted on the Internet* could subsequently be sent by the authors to an editorial board and receive endorsement after review and revision.

There are several potential advantages of E-biomed: widespread and rapid dissemination of scientific information on the Internet, improved methods of presentation and reduced cost to authors and readers.

The problems with the proposal, however, are considerable. First and foremost is the lack of real peer review for option 2. Peer review can lead to rejection of manuscripts that are based on poor science. By contrast, peer review can markedly improve submissions before final acceptance. Besides, almost all journals such as *JACC* have their manuscripts in full on their own website, accessible on the Internet. One can envision E-biomed being flooded with questionable reports that will only confuse and mislead readers. This may be especially dangerous in the case of clinical research that can cause changes in clinical practice based on faulty science. I agree with Relman (2) that clinical research is clearly different from basic research. Practicing clinicians and the lay public may not be able to evaluate the correctness of a clinical report and may adopt clinical

practices that are of no value whatsoever, or at the worst, even harmful. I would envision that E-biomed may also lend unintended authenticity to questionable medical alternatives because they are published in an authoritative data base.

There are other troublesome problems with the proposal that would be consequential:

- Societies and journals would lose their fiscal ability to support the complex editorial and review process. How would journals support the editorial staff without advertising income from the printed page and membership subscription fees?
- How would university promotion committees judge research productivity from what might turn out to be many minimally reviewed papers on E-biomed. Simply counting the numbers of "publications" could be very misleading.
- How would the reader find his or her way through the *forest* of reports on an individual topic and still be able to judge the quality of each *tree*?
- Why would journals such as *JACC* want to review material already on the Internet to validate it?
- It is unclear who would pay for and maintain such a system. Would the federal government maintain a long-term commitment to this enterprise? What happens when funding diminishes?

The current publication process has served the scientific community well. Almost all journals are either on the Internet currently or have plans to be there. It is critical that we not destroy the merits of the current process by a radical proposal of mixed merit. The proposal needs a *de novo* revision based on these and other reviewers' comments.

Correspondence: William W. Parmley, MD, Editor-in-Chief, *Journal of the American College of Cardiology*, 415 Judah Street, San Francisco, California 94122.

REFERENCES

1. Varmus H. E-biomed: a proposal for electronic publication in the biomedical sciences. NIH preprint 04.99 doc. Bethesda (MD): National Institutes of Health, April 19, 1999.
2. Relman AS. The NIH E-biomed proposal—a potential threat to the evaluation and orderly dissemination of new clinical studies. *N Engl J Med* 1999;340:1828–9.